

**MOISTURE-CURABLE, POLYETHER URETHANES
WITH REACTIVE SILANE GROUPS AND THEIR USE
AS SEALANTS, ADHESIVES AND COATINGS**

CROSS REFERENCE TO RELATED PATENT APPLICATION

This application is a Continuation-In-Part of U.S. Ser. No. 10/173,919, filed June 18, 2002, now abandoned.

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FIELD OF THE INVENTION

The present invention relates to moisture-curable urethanes containing reactive silane groups and prepared from polyether polyols having a low degree of unsaturation and to the use of these polyurethanes as sealants, adhesives and coatings.

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BACKGROUND OF THE INVENTION

Polyether urethanes containing reactive silane groups, also referred to as silane-terminated polyurethanes (STPs), and their use as sealants and adhesives is known and described, e.g., in U.S. Patents 5,554,709; 4,857,623; 5,227,434 and 6,197,912; and WO 02/06367. The silane-terminated polyurethanes may be prepared by various methods. In one method the silane-terminated polyurethanes are prepared by reacting diisocyanates with polyether polyols to form isocyanate-terminated prepolymers, which are then reacted with aminosilanes to form the silane-terminated polyurethanes. The sealants may also be prepared by reacting unsaturated monoools with diisocyanates to form intermediates containing unsaturated end groups and then converting these unsaturated groups to alkoxysilane groups by hydrosilylation. In another method the sealants are prepared in one step by the reaction of polyether diols with isocyanatosilanes.

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25 To be useful as sealants the silane-terminated polyurethanes should have a number average molecular weight of 6000 to 20,000. One method of obtaining this molecular weight is to use polyether diols

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